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Disciplines

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The Influence of Magazine Advertising on Parents' Nutrition Ratings of Food Products for Children

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Abstract

Childhood obesity currently affects approximately 22 million children under the age of five worldwide (Rochinni, 2002) and its increasing prevalence in developed nations makes it one of the most common nutritional problems among children (Sorof and Stephen, 2002). A study was conducted to investigate parents' health-related perceptions for a series of magazine advertisements for commonly advertised and popular children's food products. The study revealed that confusion exists among parents and this was most evident in relation to the energy content of food products. Parents are important due to the instrumental role they play in their child's nutrition - both as decider and provider of the different types of foods that are consumed.

Keywords: childhood obesity, magazine advertising, health perceptions

Introduction

The recent debate over television food advertising has escalated with the *Opposition (The Australian Labor Party)* to the Federal Government proposing a ban on all food and drink advertising during popular children's viewing times (Metherall, 2004). The proposal is in response to the increasing childhood obesity rate, with research indicating that there is a link between television viewing and body fatness - firstly, television viewing reduces energy expenditure by promoting sedentary behaviours and secondly, television viewing increases dietary energy intake through people's responses to food advertising (Robinson, 1998).

In Australia alone the childhood obesity rate has doubled over the past ten years with 20% of Australian children currently overweight and a further 10% obese (Thornton, 2002). Childhood obesity is therefore fast becoming a public health concern because of its potential to create a series of adverse health effects, most notably its ability to "increase the risk of premature illness and death later in life" (Ebbeling, Pawlak and Ludwig, 2002, p.473).

The National Nutrition Survey (1995) revealed that a third of Australian children aged between two and 18 years did not consume any fruit or vegetables as part of their daily diet, while three quarters of Australian children consumed foods that were high in fat - such as hamburgers, biscuits and chips - on a regular basis (Mehta, 2002). Thus it is important to understand the main factors that influence children's food choices in order to encourage healthier eating habits and, most importantly, help curb the escalating childhood obesity rate.

One of the main influences of children's food preferences is parents through the different types of foods that they expose their children to and make available for consumption. As a result, "children learn about what to eat and they receive reinforcements and incentives for eating from their families and the larger environment" (Baxter, 1998, p.64). Parents play a

very important role in relation to their children's food preferences, especially mothers who are often the main decider and purchaser of food within the family unit (McNeal, 1987). A study conducted by Skinner, Carruth, Bounds and Ziegler (2002) over a five-year period found that mothers had the strongest influence on their children's food preferences and this was in turn often influenced by their own food preferences. Hence, parents play a significant role in educating and providing their children with healthy food choices, especially during the formative years of childhood, i.e. from birth up to five years of age (Owen, 1997).

Methodology

Data for the study was collected via a survey administered with two local Illawarra childcare centres. The two childcare centres were located within close proximity of each other to ensure the respondents were demographically matched in terms of socio-economic status and educational background.

The survey tested a variety of food advertisements found in popular woman's magazines – namely the *Australian Women's Weekly* and *Woman's Day*. Magazine advertising was chosen above all other mediums because it enabled greater selectivity of target audience (Shimp 1997). Magazines enabled the study to better measure parents' perception of nutritional claims made in food advertisements without the influence of children. This is because it was assumed that not many children would read *The Australian Women's Weekly* or *Woman's Day* where the test advertisements were sourced.

Overall, two different versions of the survey were developed to enable a wider variety of advertisements to be tested, with version A testing popular savoury food products and version B testing sweet food products. The questions in both surveys remained the same but only the advertisements differed, and each survey tested five advertisements - hence ten advertisements were tested in total. Version A tested parents' perceptions of Kraft Vegemite, Sanitarium Weet-Bix, Birds Eye Vegetable Fingers, Maggi 2 Minute Noodles and Tip Top Up Bread. Version B tested parents' perceptions of Ferrero Nutella Hazelnut Spread, IXL Fruit Bars, Nestle Milo, Australian Diary Corporation '3 Serves A Day' Campaign and Kraft Light Peanut Butter.

The survey comprised of four main parts. The first part asked parents to look at each of the five successive food advertisements and answer a series of purchase intention questions immediately following each advertisement. Parents were asked to indicate whether or not they had purchased the advertised product and, if so, what were their main reasons and how often. This was used to ascertain their rationale for buying the product, as well as their usage rate. Meanwhile, parents who did not purchase the product were asked whether or not they would consider buying the product in the future, and their main reason for why they believe they would or wouldn't purchase the product.

The second part of the survey asked parents to rate each of the advertised products on a six-point itemised rating scale for a series of attributes – sugar, salt, fat, energy and overall healthiness (for example, 1= very high in sugar and 6 = very low in sugar).

The third part of the survey asked parents to indicate how often their child(ren) would consume each of the advertised products based on five available options, that is, weekly, fortnightly, monthly, yearly and never. This question was used to determine usage patterns,

and whether or not there is a correlation between parent's health perceptions towards a product and how often their children consume it.

Lastly, the fourth part of the survey asked parents a series of demographic questions to enable a profile of the sample population to be developed. In addition, parents were asked to indicate how many meals they prepare for their children per day and how much choice they give their children in relation to what they eat. This was used to determine how much control parents have over what their children consume, as well as how much freedom parents give young children to make their own food choices.

Results

Version A of the Survey

In total, 47 parents completed version A of the survey and of those parents, 83% were mothers and 17% were fathers. The survey revealed that the most commonly purchased product was Maggi 2 Minute Noodles (68%), while Birds Eye Vegetable Fingers was the least common (43%). Table 1 (below) shows the results of the survey. Rankings from 1 to 5 have been listed for each type of content whereby one is the best ranking in terms of health content; two is the second best and so forth. The *actual ranking* column ranks the sugar, salt, fat and energy content of each of the advertised products using the nutritional table found on the product's packaging, while the *parent's ranking* column reflects parents' salt, sugar, fat and energy perception for each of the products tested.

Table 1: Parents' Health Ratings – Version A

	Sugar		Salt		Fat		Energy	
	Actual Ranking	Parents' Ranking	Actual Ranking	Parents' Ranking	Actual Ranking	Parents' Ranking	Actual Ranking	Parents' Ranking
Vegemite	2	4	2	4	1	3	4	3
Weet-Bix	4	2	1	2	3	2	1	2
Vegetable Fingers	3	5	5	5	5	5	3	5
2Minute Noodles	1	3	3	3	2	4	5	4
Up Bread	5	1	4	1	4	1	2	1

The parents' rankings showed that they perceive Kraft Vegemite as being high in salt, despite Kraft clearly stating in their advertisement that Vegemite contains less salt than an average serving of bread. In addition, parents also rated Vegemite as being high in fat when it actually contains no fat at all. Parents also appeared to be confused about the Tip Top 'Up' Bread. It was rated as having the lowest level of sugar of all five products tested, despite it actually containing the most. Parents also perceived bread as being low in both salt and fat when it

actually contains a high level compared to the other four products tested. Furthermore, parents didn't believe the nutritional claims made by Maggi that their 2-minute noodles are 99% fat free, and this was reflected in their rankings. However, of all five products tested, parents best understood the Birds Eye Vegetable Fingers and thus rated it correctly as being highest in both salt and fat. Parents also had a good understanding of Sanitarium Weet-Bix and as a result rated it positively for all four variables - that is, sugar, salt, fat and energy.

Version B of the Survey

In total, 30 parents completed version B of the survey and of those parents, 80% were mothers and 20% were fathers. The survey results showed that the most commonly purchased item was milk (97%) while Kraft Light Peanut Butter was the least common (20%). Table 2 (below) shows the results of the survey and as in Table 1, one is the best ranking in terms of health content; two is the second best and so forth.

Table 2: Parents' Nutritional Rating – Version B

	Sugar		**Salt**		**Fat**		**Energy**	
	Actual Ranking	Parents' Ranking	Actual Ranking	Parents' Ranking	Actual Ranking	Parents' Ranking	Actual Ranking	Parents' Ranking
Nutella	4	4	1	4	4	3	2	2
Fruit Bars	5	3	3	3	2	1	5	4
Milo	3	5	5	2	3	2	3	1
Milk	1	1	2	1	1	5	4	3
Peanut Butter	2	2	4	5	5	4	1	5

The parents' rankings revealed that parents perceived milk as having the highest fat content when it actually has the lowest. However, despite this, parents in the sample population appear to have a good nutritional knowledge of milk and were therefore able to correctly rate it as providing moderate energy while being low in sugar and salt. Meanwhile, parents in the sample population rated both Nestle Milo and Ferrero Nutella Hazelnut Spread as being high in energy despite Kraft Light Peanut Butter outperforming both Nutella and Milo. And lastly, IXL fruit bars promote themselves as being healthy via their "natural colours and flavours" claim, however the product did not perform very well compared to the other products tested in terms of sugar, salt and energy. Parents' nutritional rating for IXL fruit bars showed that they did not wholly believe the nutritional claims made by IXL, with fat the only variable that parents rated positively.

Across the sample as a whole, the majority (49%) of parents stated that they prepared an average of three meals a day for their children. This indicates that parents in the sample population have a high degree of control over what their children eat because they prepare and have control over the three major meals - that is, breakfast, lunch and dinner. Furthermore,

parents in the sample population also indicated that they do give their children a reasonable amount of choice in relation to what they consume (55%).

Discussion

The study found that a certain degree of confusion does exist among parents, especially in relation to the salt, fat and energy content of many popular children's food products. This indicates that the halo effect may be at play when parents assess food products. The halo effect occurs when parents' rating for a specific product is dominated by their overall impression of the product (McDaniel and Gates, 2002). Hence parents continually rated Tip Top Up bread and Sanitarium Weet-Bix favourably - despite the products performing poorly on some of the variables tested. Furthermore, parents' ratings were also affected by their own beliefs and prior experiences and this was most evident with the Kraft Vegemite advertisement. Parents therefore chose to believe that the popular condiment was high in salt, despite the claims made by Kraft in their advertisement that Vegemite contains less salt than a serving of bread itself.

However, of the four variables tested - energy was the most misunderstood. This may be due to the heavy use of energy claims by food manufacturers to promote their food products – most notably Nestle Milo and Ferrero Nutella Hazelnut Spread. Nestle refers to their Milo as "energy food drink", while Nutella's main slogan is "energy to live and learn". As a result, parents rated both Milo and Nutella as being high in energy and this signifies that parents believe the claims presented in the advertisements and are thus more susceptible to the energy claims made by food manufacturers. The survey results also suggest that there is a lack of nutritional table use among parents and this poses the question "are health claims in advertising far more important and effective than nutritional labeling?"

Limitations

Due to monetary constraints, one of the major limitations of the study was the loss of colour during reproduction of the advertisements due to photocopying and this in turn has may have reduced the effectiveness of the advertisements presented to parents. The survey results also found some contradiction between part one and three of the survey. That is, some parents specified in part one of the survey that they have never purchased the product for their child, yet in part three parents stipulated that their children consumed the product on either a weekly, fortnightly or monthly basis. Future studies should therefore clarify where children are consuming each of the advertised products because it has been acknowledged that these products may be consumed in childcare centres and/or outside the family home; hence, parents have never personally bought the product for their child.

Conclusion

This study aimed to ascertain the sorts of nutritional messages that parents received from magazine advertisements for a variety of popular children's food products, and found that a certain degree of confusion does exist among parents – mainly in respect to the energy content of foods. The current Australian Prime Minister, Mr. John Howard, responded to the call for a ban on food advertising during popular children's viewing times by stating that it is

ultimately the parents' responsibility for what they feed their children. However, the outcomes of this study suggest that perhaps food-advertising regulation is needed to help reduce consumer confusion *among parents* and address the increasing prevalence of childhood obesity in Australia.

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